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By-Wright, Robert D.

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To determine whether or not the vocational curriculum offered in Wyoming secondary schools was directed toward providing graduates with occupational skills that permitted employment, three sources of information were examined: (1) industrial arts and trades and industry classes for the 1962 to 1967 school years, (2) attitudes of Wyoming industry concerning vocational education in secondary schools, and (3) the types and numbers of non-agricultural job placements in Wyoming for 1962 to 1967. Some findings were: (1) Job placements in the state of Wyoming were generally declining, (2) The number of classes and the class enrollments were increasing, (3) The data indicated a need for vocational education in Wyoming, (4) Employers thought it feasible for Wyoming schools to prepare students for specific vocations, (5) A vocational program more technical in nature might be desired, and (6) Employers felt industry should provide on-the-job training for employees, but schools should teach good work habits and good attitudes toward work along with skills and knowledge. Recommendations included: (1) better means of communication between educators and industrial personnel, (2) more involvement of industry in vocational education, (3) special attention to development of post-high school vocational programs, and (4) more opportunity for vocational training by the high schools. (DM)

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ARE WYOMING'S SECONDARY SCHOOL VOCATIONAL PROGRAMS GEARED TO WYOMING INDUSTRY?

by

Robert D. Wright

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Research Coordinating Unit,

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CHAPTER I

INTRODUCTION

Employment needs of industry and most occupational areas have undergone substantial change during the twentieth century. The worker in the community has been greatly effected by the development of new tools, machines, devices, and precision instruments. Day by day workers have felt the effect of automation and cybernetics.

> The work world is in a change of a magnitude as large or larger than the great industrial changes of an age ago when machines first started doing the work only hands could do before. (1:2)*

The effects of automation are twofold: first, it creates unemployment by taking over jobs formerly held by men; and secondly, it produces new jobs requiring skills not in existence before. (1:2)

The problem for youth as they enter the work world is one of adjustment. They must be prepared to take their place in the work world and learn the skills needed under the new concept of automation. George B. Leonard describes the situation in this way:

> During this decade, a record 26 million young people will enter the nations already overloaded labor force. At most, two out of ten will be college graduates, even if college enrollments double. The remaining eight out of ten--more than 20 million--will be high-school drop-outs, high school graduates and those who fail to finish four years of college. Every available study of job market shows that from this 20 million will come most of our unemployed.

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*Throughout this paper bibliographical references will be made in this manner. The first number indicates the bibliography item referred to; the second number indicates the page.

> A growing number of experts are using these figures to argue that our schools must turn to the immediate needs of the majority, must train them for specific jobs rather than prepare them for college. (3:36)

A study of Wyoming's 1950 to 1960 migration of population patterns indicated that the state lost nearly 5,000 young people between the ages of 15 and 24. Many young people in this group appeared to be seeking employment for the first time. They were compelled to seek employment outside the state because of the slow industrialization and urbanization in Wyoming. It has been stated that a trained labor force in Wyoming would increase the rate of industrialization because industries are attracted to areas with a trained or skilled labor force. (5:30)

Statement of the Problem

The purpose of this study was to determine whether or not the vocational curriculum offered in Wyoming's secondary schools was directed toward providing Wyoming's high school graduates with occupational skills that permitted employment in Wyoming's businesses, industries, and trades.

Importance of the Study

In this study an attempt was made to determine if Wyoming's secondary school vocational programs were geared to Wyoming's industries in an effort to provide useful information to help the Wyoming schools prepare vocational curriculum offerings. The study was also conducted to provide useful information for the Wyoming Research Coordinating Unit concerning vocational education in Wyoming.

Procedure Followed

Information for this investigation was gathered in three steps:

1. The number and types of vocationally oriented classes offered by Wyoming's secondary schools was discovered by examining the trade and industry and industrial arts curriculum records of the State Department of Education at the capitol building in Cheyenne, Wyoming. The school records were examined for the 1962 to 1967 school years. All industrial arts and trades and industry classes were recorded with enrollment figures for each class.
2. Opinions and thoughts of Wyoming industry concerning vocational education in the secondary schools was obtained by use of a questionnaire which was sent to the seventy-two largest employers in industry in Wyoming. The names and addresses of the industries were obtained from the 1967 Wyoming Industrial Capability Register, which was furnished to the writer by the Wyoming Natural Resource Board in Cheyenne, Wyoming. The questionnaire offered twelve statements relative to vocational education in Wyoming. The respondent was asked to indicate by a check mark the term which best described his feelings about each statement. He was offered a choice of three terms: (1) Agree, (2) Undecided, and (3) Disagree. Space was also provided to the right of the terms for comments. Each statement was selected on the basis of providing information in a specific area. Specific areas covered by the statements were: (1) Need, (2) Philosophy, (3) Type of Program, and (4) Responsibility. A cover letter explaining the purpose of the study was sent with the questionnaire to each industry. A copy of the questionnaire and the cover letter will be found in the Appendix.

3. The types and numbers of nonagricultural job placements in Wyoming for the 1962 to 1967 period were found by examining the statistical reviews of the Employment Security Commission of Wyoming for the period. Information was supplied by the local Employment Security Office in Laramie, Wyoming, as well as by the state Employment Security Commission in Casper, Wyoming.

Limitations of the Study

The study was limited to: (1) vocationally oriented courses offered in industrial arts and trades and industry classes in Wyoming's secondary schools for the 1962 to 1967 period; (2) numbers and types of nonagricultural job placements registered with the Wyoming Employment Security Offices for the 1962 to 1967 period; (3) feelings and opinions from the seventy-two largest private industries in the state of Wyoming hiring twenty-five or more employees.

Definition of Terms

Underemployed refers to an individual who possesses some vocational skill, but due to some circumstance has an earning power lower than what is expected.

Underskilled refers to an individual who possesses some basic vocational skill, but needs more training to upgrade his skill to meet the present employment requirements.

Unskilled refers to an individual who lacks specific vocational skills in any special trade.

Automation is the technique of making a process or system automatic. Automation is the automatically controlled operation of an apparatus, process or system, especially by electronic devices. (11:60)

Cybernetics refers to the comparative study of the control system formed by the nervous system and brain and mechanical-electrical communication systems, such as computing machines. (11:206)

Technical Education refers to education to earn a living or occupation in which success is dependent largely upon technical information and understanding of the laws of science and principles of technology as applied to modern design, production, distribution, and service. (2:20)

Trade and Industrial Education is instruction which is planned to develop basic manipulative skills, safety judgment, technical knowledge, and related occupational information for the purpose of fitting persons for initial employment in industrial occupations and upgrading or retraining workers employed in industry. (2:20)

Vocational Education refers to vocational or technical training or retraining which is given in schools or classes under public supervision and control or under contract with a state board or local educational agency, and is conducted as part of a program designed to fit individuals for gainful employment as semi-skilled or skilled workers or technicians in recognized occupations. (2:22)

Industrial Arts Education is an instructional shopwork of a non-vocational type which provides general educational experiences centered around the industrial and technical aspects of life today and offers orientation in the areas of appreciation, production, consumption, and recreation through actual experiences with materials and goods. It also serves as exploratory experiences which are helpful in the choice of a vocation. (2:11)

CHAPTER II

REVIEW OF PERTINENT LITERATURE

Much has been written in the past few years concerning vocational education in the United States. Relatively few studies have been published directly relating to the functional effectiveness of vocational education training programs for industries located in specific areas. Most of the literature regarding vocational training has come about through the enactment of federal legislation for vocational education in the United States. A number of federal acts pertinent to this study are discussed below.

Legislative Enactments

The Smith-Hughes Act of 1917 (Public Law 347). The Smith-Hughes Act was passed by Congress to appropriate funds for programs in vocational education. The purposes of the programs were to promote, in cooperation with the states, vocational education in such subjects as agriculture and trades and industry and to provide for the preparation of teachers in vocational subjects. The objectives of these programs were to develop skills for useful employment (a) by actively involving students into the program rather than just training them for a specific skill; (b) by directing and relating the program to students who were willing to be trained in agriculture, trades in general, and teacher education in vocational areas; (c) by relating school work to specific occupational goals. The Smith-Hughes Act provided for a permanent appropriation of

$7,138,331 annually. This appropriation was mainly directed toward training people in public school systems and in other federal and state supported programs. (6:929)

The George-Barden Act of 1946 (Public Law 586). The purpose of the George-Barden Act was to amend the George-Deen Act to provide for additional vocational training programs. The Act was mainly directed to the training of persons in the following areas: (1) distributive retail and wholesale trades, (2) the fishing industries, (3) home economics, (4) general nursing, and (5) vocational guidance. The George-Barden Act authorized an annual appropriation of $29,267,081. The Act provided for certain maximum reimbursements for vocational programs. (7:775)

The Vocational Education Act of 1963 (Public Law 88-210). The Vocational Education Act consolidated previous legislation in the vocational field in an attempt to insure the improvement of existing programs and to develop new programs to support the part-time employment which would enable many young people to continue their vocational training on a full-time basis. The Act was directed at both the youth and the adult worker: to high school students, unemployed high school dropouts, high school graduates who needed additional training, adult employees who could profit from upgrading in learning or skills, the jobless or underemployed adults who needed specialized training to become fully employable. The legislation, moreover, was written to improve the quality of vocational education. The Vocational Education Act authorized an appropriation of $60,000,000 in 1964, $118,500,000 in 1965, $177,500,000 in 1966, and $225,000,000 for each fiscal year thereafter. (8:403)

The Economic Opportunity Act of 1964 (Public Law 88-452). The purpose of the Economic Opportunity Act was to eliminate the paradox of poverty in the midst of plenty in the nation by giving everyone the opportunity to work, and the opportunity to live in dignity and decency. The objectives of the Act were: (a) to expand opportunities for youth to gain the skills and experience they must have to become full participants in our society and stable parents in years to come; (b) to stimulate communities to initiate local action programs to attack the roots of poverty; (c) to help rural families now destitute to increase their income through a program of small capital grants and loans; (d) to provide a sounder base for rehabilitation of poor areas of our great cities by deserving and expanding small business activities; (a) to provide special programs for undereducated adults and migratory agricultural workers; (f) to encourage more state to use public assistance as an instrument for helping families lift themselves out of poverty; and (g) to recruit and train voluntees who will help carry out the war on poverty. The Economic Opportunity Act authorized an appropriation of $412,500,000 for Title I, $340,000,000 for Title II, $35,000,000 for Title III, $150,000,000 for Title V, and $10,000,000 for Title VI. Title IV, loans, had no set appropriation. (9:508)

Vocational Education in Wyoming

The purpose of vocational education in Wyoming, as in any other state, is to provide training, to develop skills, abilities, understandings, work habits, attitudes and appreciations, and to give information

and knowledge needed by workers to enter and progress in employment on a productive and useful basis. (13:4)

The Wyoming State Department of Education publication, Organization and Administration of Vocational Education in Wyoming, describes vocational education as under public supervision when it meets the following criteria:

1. It is organized and operated under the direction of a state or local board responsible for expenditure of public-school funds for vocational education in the state or community.

2. The teachers are paid from public funds in the same way as other public-school teachers employed by the state or local board responsible for vocational education are paid.

3. Officials on the staff of a state or local board for vocational education have full charge of: (a) selection, salaries, and length of term of teacher, (b) qualifications and admission of the pupils, (c) content and organization of all courses and curricula. (13:5)

In the 1960-1961 fiscal year, the state of Wyoming had a total expenditure of $759,946.51 for vocational education. Of the total expenditure for vocational education, $170,378.77 was derived from the federal government, $68,382.20 was derived from the state government, and $521,185.54 was derived from the local government. (10:15) The federal funds for vocational education in Wyoming were primarily derived under the benefits of the Smith-Hughes Act with a state allotment of $30,000, and the George-Barden Act with a state allotment of $135,000. (10:18)

Vocational education had been divided into the five areas of agriculture, distributive occupations, home economics, trades and industry, and practical nursing. The state of Wyoming had a total enrollment of 6,651 students in all vocational areas in the 1960-1961

fiscal year. Of the total enrollment in vocational classes, 1,533 students were in agriculture, 478 students were in distributive education, 1,112 students were in trades and industry, 3,508 students were in home economics, and 6 students were in nursing. (10:9)

The trade and industry education programs were designed to serve training needs of persons who were engaged in, or were ready to engage in industrial employment. A trade and industry program could include any subject that would aid students in the development of manipulative skills, trade morale, safety practices, trade judgment, and acquired technical knowledge needed for employment in occupations for which training was given. (13:17)

The need for trade and industry education in Wyoming may be seen in the following quotation:

> In 1950, approximately 38% of the total number of employed persons in Wyoming were in occupations for which training can be given in Trade and Industry Education programs. From 1940 to 1950, the number of persons engaged in these occupations increased 46%, while the total employed in all occupations in Wyoming increased 31% during the ten-year period. (13:17)

Enrollment in vocational trades and industry classes in the United States was reduced from 968,114 in 1959 to 938,490 in 1960. The reduction in enrollment was 3.1 percent or 29,624 students. The enrollment in trades and industry classes in the 1960-1961 fiscal year for Wyoming showed that of the total enrollment of 1,112 students, 1,022 were males and 90 were females. (10:48-9)

A survey conducted by the Wyoming State Department of Education in the 1953-1954 school year indicated the 64.7% of the high schools in Wyoming offered some vocational education. The study also showed that

7% of the high schools in Wyoming offered trade and industry programs. The same study indicated that 35.8% of all students attending public high school in Wyoming had some vocational education training. The study also showed that 35.3% of all students in Wyoming's public high schools had some trade and industry training. (13:9)

Expenditures for vocational trades and industry education for the 1960-1961 fiscal year indicated that a total of $112,768.30 was used by Wyoming in that period. Of the total expenditure for trade and industry education in Wyoming, $51,000.00 was supplied by the federal government, $11,518.41 was supplied by the state government, and $50,249.83 was supplied by the local government. (10:50)

Wyoming Studies

Studies concerned with vocational education in Wyoming are very limited. The author was able to find three studies related to vocational education in Wyoming which have some bearing on this study.

Earl D. O'Dell and John T. Thompson conducted a study in 1965 concerned with the educational needs of adults in Wyoming. The study indicated that education in Wyoming had three unique problems. The three problems were: (1) Sparce population, coupled with great distances between small population centers complicated the problems of offering a comprehensive high school education program; (2) The nature of Wyoming's economy further complicated the educational process. Many industries have been seriously effected by automation and new industries have been slow to move into the state. All of these factors effect the large out-migration of youths from the state; (3) Wyoming had a relatively low per capita assessed valuation which created limited tax resources

for education. The problem was one of spreading the tax resources over the diverse areas and needs of the state. The study also indicated certain deficiencies in the technical-vocational education of Wyoming. The study stated that relatively few programs were being offered in the field of technical-vocational education. (5:254)

> Unfortunately, many of our high schools, because of their small size, do not teach a full industrial arts curriculum and few are offering any vocational-oriented adult education programs. Wyoming's industries, with a few exceptions, have not yet developed in-service educational programs designed best to train their personnel for present-day occupations. Neither industry nor the state's educational institutions has developed extensive cooperative programs for meeting this educational need. (5:256)

The Wyoming Department of Labor and Statistics prepared a manpower study for the research office of adult education at the University of Wyoming. The study offered occupational and industrial estimates and projections for the labor force of Wyoming for 1965 and 1970. Information gained from the study of the craftsmen and operatives divisions may be seen in Table I. (12:4-5)

Don Nagel conducted a study in 1967 concerned with the attitudes of industry and secondary school administrators toward vocational-technical education in Wyoming. The following conclusions were drawn from the study:

1. There is a connection between the concurrent problems of industry being able to find qualified help and our young people being unable to find jobs.
2. The current educational programs offered in our public schools do not prepare our young people for employment.
3. Vocational-Technical Education should be offered in our public schools.

4. Even the inclusion of limited basic skills in the general high school program is seen as being insufficient preparation for employment.
5. Training beyond the high school is needed to prepare students for employment.
6. Programs of specialization, which qualify the student to do a specific job, are needed.
7. More technical programs, which provide a combination of knowledge and skills, are needed.
8. The responsibility for Vocational-Technical Education is seen to lie with the state.
9. Neither the local school districts, nor the state, nor the federal government should be expected to carry the full burden of financing Vocational-Technical Education.
10. The local school district and the state both should share in the financing of Vocational-Technical Education.
11. Educators see the need for federal funds to supplement the local and state contributions.
12. There is no apparent conflict of interest between industry and the student. In order to serve the student, Vocational-Technical Education must also serve the needs of industry.
13. There seems to be no great difference in the attitudes of Industry and Educators toward Vocational-Technical Education.
14. Both Industry and Educators are aware of the shortcomings of our current Educational programs and cognizant of the importance of Vocational-Technical Education. (4:65-6)

TABLE I*

OCCUPATIONAL AND INDUSTRIAL ESTIMATES AND PROJECTIONS
FOR THE LABOR FORCE OF WYOMING FOR 1965 AND 1970

Occupational Title	Estimate 1965	Projection 1970
Craftsmen		
Bakers	120	120
Blacksmiths, Forgemen, and Hammermen	85	75
Boilermakers	45	30
Cabinetmakers and Patternmakers	60	65
Carpenters	1,700	1,700
Cranemen, Hoistmen, and Construction Machinery Operators	152	170
Electricians	951	1,001
Foremen	2,600	2,875
Linemen and Servicemen	686	816
Locomotive Engineers	395	350
Locomotive Firemen	240	200
Machinists and Job Setters	510	525
Masons, Tile Setters, and Stone Cutters	255	260
Mechanics and Repairmen	2,035	1,865
Airplane	133	150
Automobile	1,490	1,300
Radio and Television	167	175
Office Machine	30	35
Railroad	215	205
Other Mechanics and Repairmen	2,355	2,535
Millers	106	121
Millwrights	7	10
Motion Picture Projectionists	45	45
Painters, Paperhangers, and Glaziers	585	605
Photo Engravers and Lithographers	5	5
Plasters and Cement Finishers	140	140
Plumbers and Pipe Fitters	650	750
Pressmen and Plate Printers, Printing	67	75
Shoemakers and Repairers	48	41
Stationary Engineers	1,575	1,800

TABLE I (Continued)

Occupational Title	Estimate 1965	Projection 1970
Craftsmen (Continued)		
Structural Metal Workers	135	150
Tinsmiths, Coppersmiths, Sheet Metal Workers	125	150
Operatives		
Apprentice	400	520
Auto Mechanics	65	80
Bricklayers and Masons	25	30
Carpenters	90	110
Electricians	40	50
Machinists and Toolmakers	25	35
Plumbers and Pipe Fitters	35	50
Metalworking Trades	35	40
Printing Trades	20	35
Others	65	90
Attendants, Auto Service and Parking	1,450	1,575
Brakemen and Switchmen Railroad	530	500
Bus Drivers	295	310
Dressmakers and Seamstresses	275	30
Laundry and Dry Cleaning Operatives	960	985
Meat Cutters	270	270
Mine Operative and Laborers	4,200	4,700
Painters, except construction and maintenance	50	60
Sawyers	175	185
Taxi Drivers and Chauffeurs	121	105
Truck Drivers and Deliverymen	4,520	4,735
Other Special Operatives and Kindred Workers	1,984	2,350
Operatives and Kindred Workers	3,205	3,495
Manufacturing	1,540	1,640
Non-Manufacturing	1,665	1,855
Totals	37,088	39,805

*(12:4-5)

CHAPTER III

ANALYSIS OF DATA

The first step in the treatment of data was to record the numbers and types of nonagricultural job placements in Wyoming for the 1962 to 1967 period. The job placement data were then analyzed and the changes in job placements from 1962 to 1967 were calculated. The numbers and types of nonagricultural job placements in Wyoming and the changes in the job placements may be seen in Table II.

The next step in the treatment of data was to record the numbers and types of trades and industry and industrial arts classes offered in Wyoming's secondary schools for the 1962 to 1967 school years. The total student enrollment in each type of class was recorded. The numbers and types of industrial arts and trades and industry classes offered in Wyoming and the total enrollment of students in the classes are shown in Table III.

The final step in the treatment of data was to tabulate and calculate the responses from the questionnaires sent to the largest employers in Wyoming. Seventy-two questionnaires were sent out, and fifty-five, or 76% were returned. The raw scores on each statement in the questionnaire are shown in Table IV.

In a study of this nature, using responses on a questionnaire, grouping by percentages often provides a most meaningful way to analyze the data. The percentage of each response by industry to each statement

TABLE II

NONAGRICULTURAL JOB PLACEMENTS IN WYOMING 1962-1967

Major Industrial Division	1962 Number[a]	1962 Change[b]	1963 Number	1963 Change	1964 Number	1964 Change	1965 Number	1965 Change	1966 Number	1966 Change	1967 Number
Forestry and Fisheries	4	+ 9	13	+ 10	23	+ 9	32	+ 26	58	+ 5	63
Mining	876	- 77	799	+106	905	+ 10	915	+ 55	970	+294	1264
Construction	2507	-374	2133	0	2133	- 59	2074	-158	1916	- 59	1857
Manufacturing	1232	-173	1059	- 34	1025	-108	917	+ 59	976	+ 3	979
Interstate Railroads	41	0	41	- 6	35	+ 24	59	- 13	46	0	46
Other Public Utilities	1259	+ 31	1290	-169	1121	-293	828	+139	967	- 65	902
Wholesale and Retail Trade	3732	- 52	3680	- 74	3606	-205	3401	+439	3840	-134	3706
Insurance and Real Estate	346	- 67	279	+ 24	303	- 35	268	- 29	239	- 14	225
Service	2539	-295	2244	+ 86	2330	-281	2049	+704	2753	-579	2174
Private Household	2405	+306	2711	-114	2597	-376	2221	+ 77	2298	- 74	2224
Federal Government	456	+438	894	-383	511	-165	346	+127	473	-258	215
State Government	156	+ 43	113	- 17	96	+ 83	179	+ 32	211	- 35	176
Local Government	108	- 23	85	+ 12	97	+159	256	-113	143	- 16	127

[a]Refers to number of job placements.

[b]Refers to change in number of job placements.

TABLE III

INDUSTRIAL ARTS AND TRADES AND INDUSTRY
CLASSES OFFERED IN WYOMING 1962-1967

Class	1962-1963[a] No. Class	1962-1963[b] No. Stu.	1963-1964 No. Class	1963-1964 No. Stu.	1964-1965 No. Class	1964-1965 No. Stu.	1965-1966 No. Class	1965-1966 No. Stu.	1966-1967 No. Class	1966-1967 No. Stu.
Industrial Arts										
General Shop	79	1525	63	842	53	1255	73	878	58	957
Mechanical Drawing	53	981	75	1658	50	1099	71	1153	63	1067
Woodworking	42	901	37	622	45	314	58	920	68	1103
Auto Mechanics	15	286	4	42	8	270	22	351	14	220
Arch. Drawing	7	95	3	51	4	108	3	54	0	0
Machine Shop	8	199	0	0	7	130	4	81	7	110
Metal Shop	12	262	11	180	9	288	12	164	16	226
Crafts	11	223	19	324	16	284	25	382	20	297
Drafting	18	158	12	166	11	195	15	210	24	325
Electronics	2	38	2	24	3	36	(	86	7	119
Photography	1	11	1	12	1	13	0	0	0	0
Electricity	0	0	16	575	8	277	8	142	11	176
Carpentry	0	0	0	0	0	0	1	5	3	53
Shop Math.	0	0	0	0	0	0	1	28	0	0

TABLE III (Continued)

Class	1962-1963 No. Class	1962-1963 No. Stu.	1963-1964 No. Class	1963-1964 No. Stu.	1964-1965 No. Class	1964-1965 No. Stu.	1965-1966 No. Class	1965-1966 No. Stu.	1966-1967 No. Class	1966-1967 No. Stu.
Trades and Industry										
Auto Mechanics	2	53	7	105	11	302	14	234	20	161
Building Trades	0	0	4	59	2	18	1	6	3	15
Metal Shop	1	8	21	496	1	13	4	51	0	0
Welding	0	0	24	620	2	72	3	58	2	19
Electricity	2	31	8	165	3	88	4	54	2	40
Mechanical Drawing	0	0	5	97	5	78	4	46	4	62
Machine Shop	0	0	11	182	6	144	10	202	6	64
Woodworking	0	0	6	133	5	87	4	64	0	0
Vocational Auto Mech.	0	0	29	820	0	0	0	0	0	0
Metal Crafts	0	0	0	0	0	0	1	10	0	0
Carpentry	0	0	0	0	0	0	0	0	1	6
Cabinet	0	0	0	0	0	0	0	0	2	14
Drafting	0	0	0	0	0	0	0	0	3	47

[a]Refers to number of classes.

[b]Refers to number of students.

TABLE IV

RAW SCORES ON QUESTIONNAIRE TO INDUSTRY

Question Number	Agree	Undecided	Disagree	No Response
1.	43	3	8	1
2.	33	2	18	2
3.	43	5	5	2
4.	6	19	27	3
5.	30	6	18	1
6.	49	3	1	2
7.	26	17	10	2
8.	10	14	27	4
9.	11	13	30	1
10.	47	5	0	3
11.	51	2	1	1
12.	33	16	4	2

is shown in Table V. As a further means of analysis by percentage, the responses to each statement are shown in circle graphs for each statement in Figures 1 through 12.

As noted in the instruction to the respondents, additional comments were solicited. Many comments were made by the respondents. A compilation of these comments will be found in the Appendix. No attempt was made to categorize or analyze the comments on the statements made in the questionnaire. They were simply listed according to the statement to which they pertained.

The reader is urged to examine the comments which were made. The comments probably provide the best indication of the extreme range of attitudes toward vocational education in Wyoming. Some of the comments only reinforce the choices made on the questionnaire. Many comments, however, suggest positive ideas for the solution of the specific problem.

The general information section of the questionnaire contained questions relative to employment in Wyoming. It was discovered that 1.8% of the industries responding to the questionnaire were in the forestry or fisheries type of business; 21.8% were in the mining business; 12.7% were in the contract construction business; 58.2% were in the manufacturing business; 3.7% were in the wholesale and retail trade business; and 1.8% were in the business of services.

Mean scores were calculated for the first questions under the general information section. The study indicated that the average number of employees employed by the industries responding to the questionnaire was 107. The average number of trainees employed by the industries was four. The average turnover per year for the industries was thirteen.

TABLE V

PERCENTAGE OF RESPONSE BY INDUSTRY TO EACH QUESTION

Question Number	Agree	Undecided	Disagree	No Response
1.	78.2	5.5	14.5	1.8
2.	60.0	3.6	32.8	3.6
3.	78.2	9.1	9.1	3.6
4.	10.9	34.5	49.1	5.5
5.	54.5	10.9	32.8	1.8
6.	89.1	5.5	1.8	3.6
7.	47.3	30.9	18.2	3.6
8.	18.1	25.4	49.1	7.4
9.	20.0	23.6	54.6	1.8
10.	85.4	9.1	.0	5.5
11.	92.8	3.6	1.8	1.8
12.	60.0	29.0	7.4	3.6

FIGURE 1: JOB TRAINING BEYOND HIGH SCHOOL IS NEEDED IN A LIMITED NUMBER OF SKILLS TO QUALIFY FOR EMPLOYMENT IN A SPECIFIC JOB.

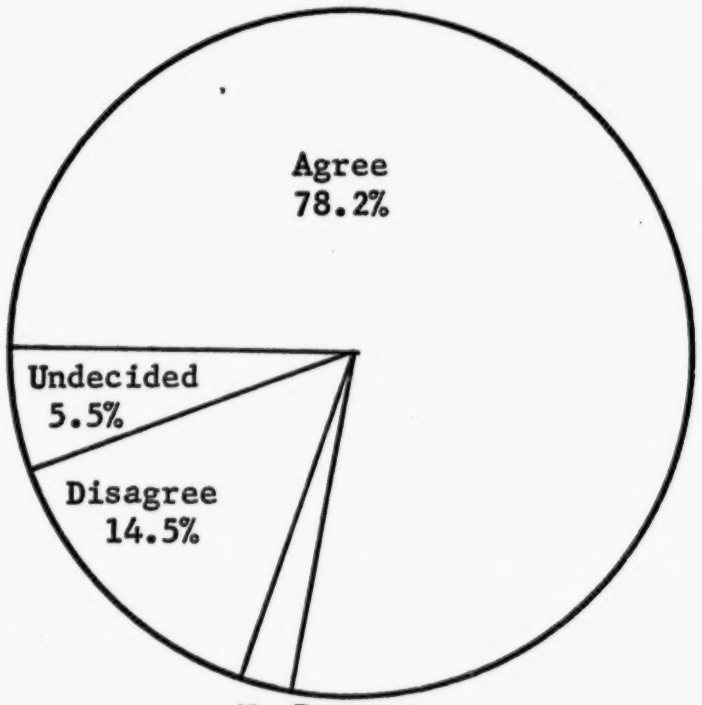


FIGURE 2: VOCATIONAL-TECHNICAL EDUCATION IN THE PUBLIC SCHOOLS OF WYOMING SHOULD BE BASED ON THE EMPLOYMENT NEEDS OF WYOMING.

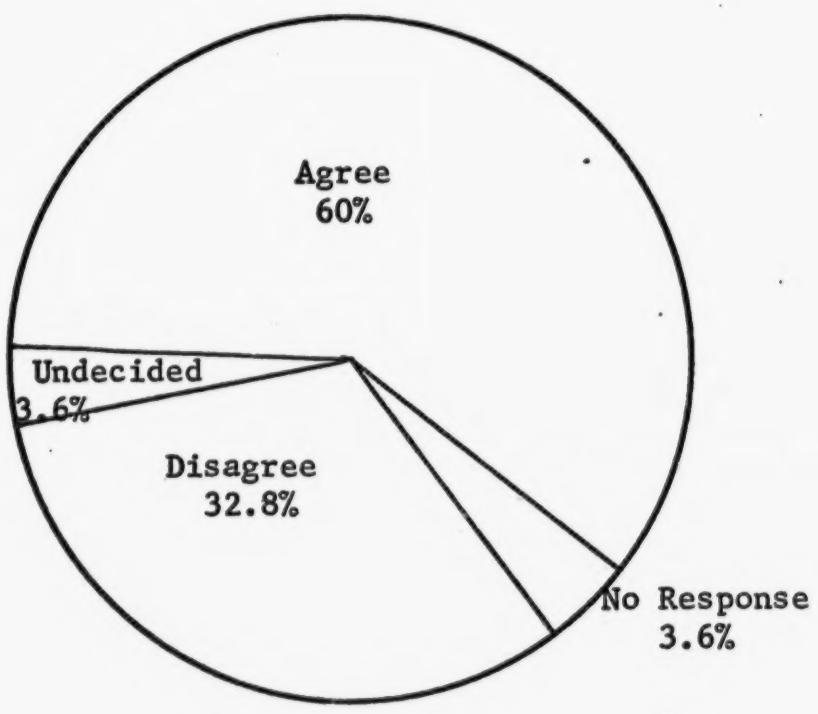


FIGURE 3: VOCATIONAL EDUCATION IN THE PUBLIC HIGH SCHOOLS OF WYOMING SHOULD BE BASED ON THE NEEDS OF INDUSTRY.

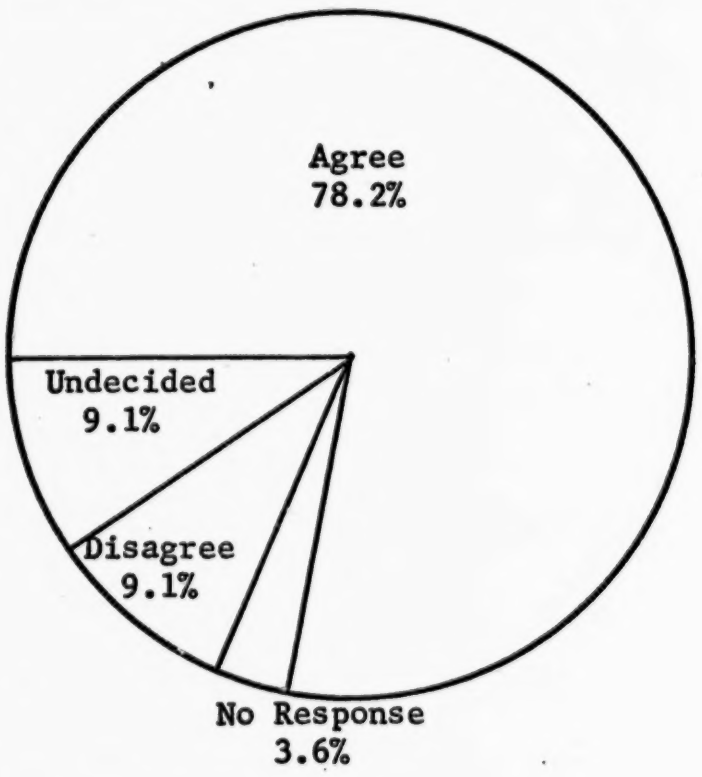


FIGURE 4: THE PUBLIC HIGH SCHOOLS OF WYOMING OFFER SUFFICIENT VOCATIONAL EDUCATIONAL OPPORTUNITIES TO PREPARE OUR YOUNG PEOPLE FOR EMPLOYMENT.

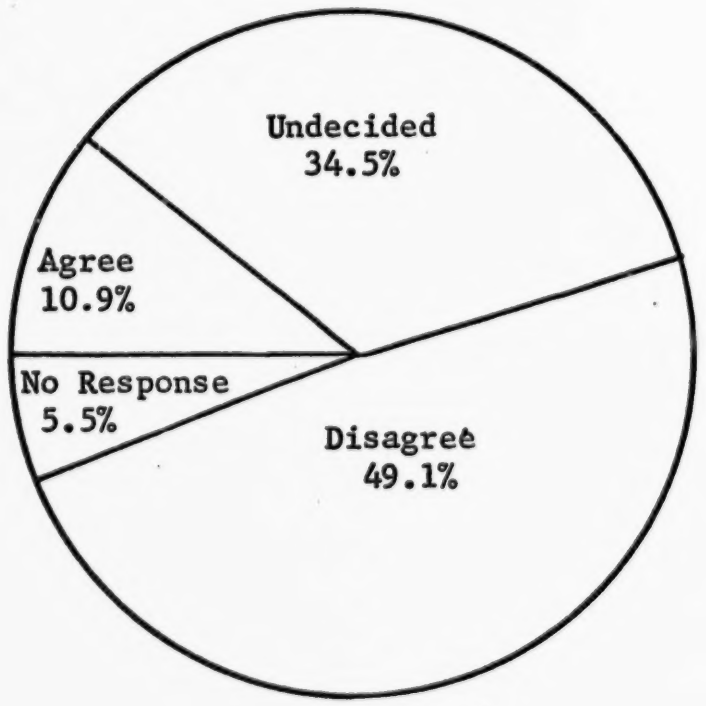


FIGURE 5: A GENERAL HIGH SCHOOL EDUCATION IS SUFFICIENT FOR EMPLOYMENT IN MOST INDUSTRIES.

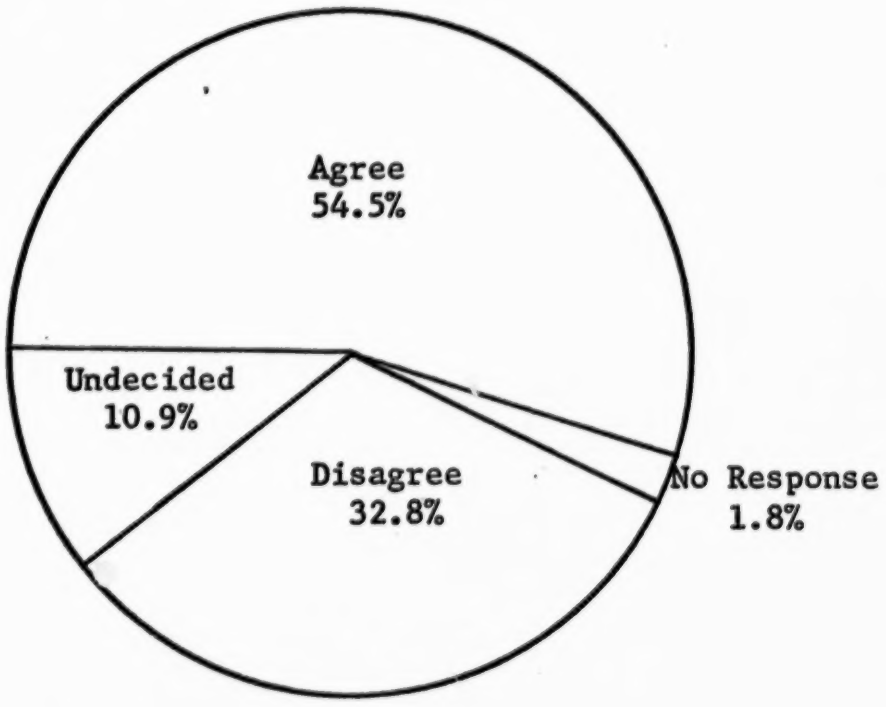


FIGURE 6: TO BEST SERVE THE STUDENTS OF WYOMING, VOCATIONAL EDUCATION PROGRAMS MUST BE GUIDED BY THE NEEDS OF BOTH LOCAL AND OUT OF STATE INDUSTRY.

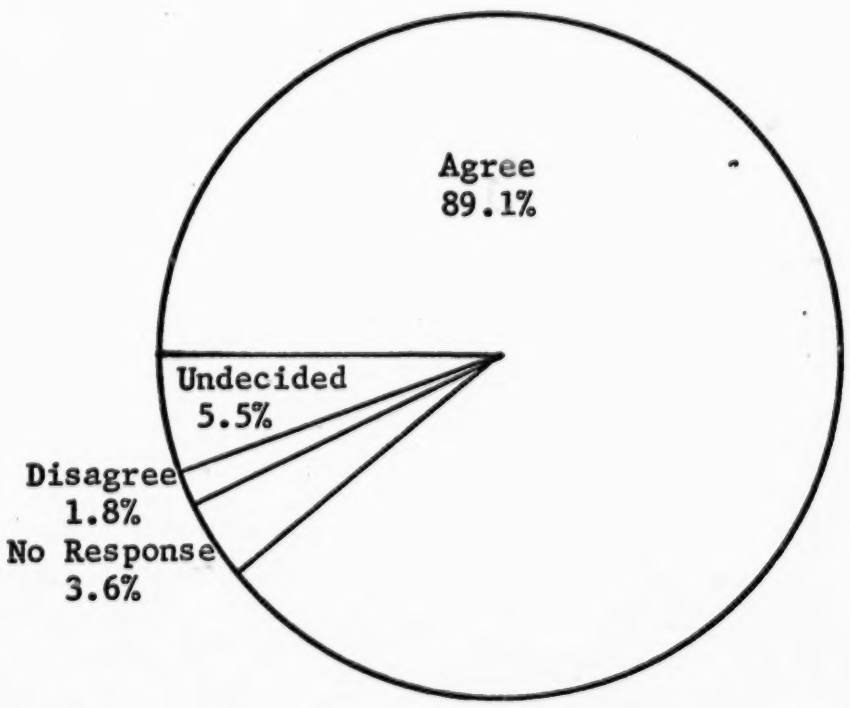


FIGURE 7: PROGRAMS MORE TECHNICAL IN NATURE, WHICH COVER KNOWLEDGE AND SKILLS TO GREATER DEPTH THAN THOSE PRESENTLY BEING OFFERED, SHOULD BE OFFERED BY THE HIGH SCHOOLS IN WYOMING.

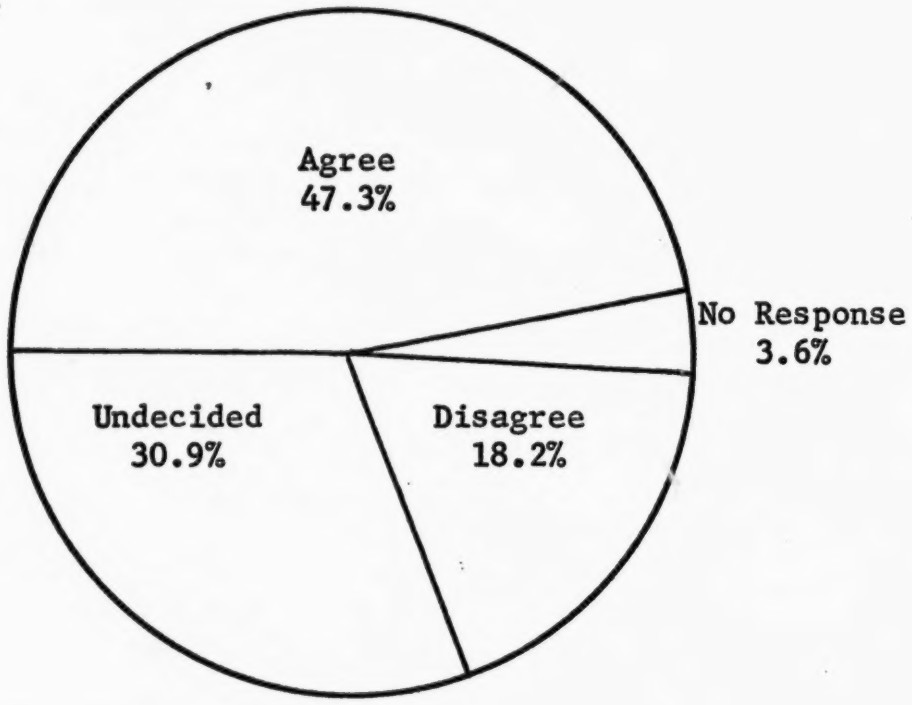


FIGURE 8: WYOMING INDUSTRY OFFERS SUFFICIENT JOB OPPORTUNITIES FOR GRADUATING HIGH SCHOOL STUDENTS WANTING EMPLOYMENT IN THE STATE.

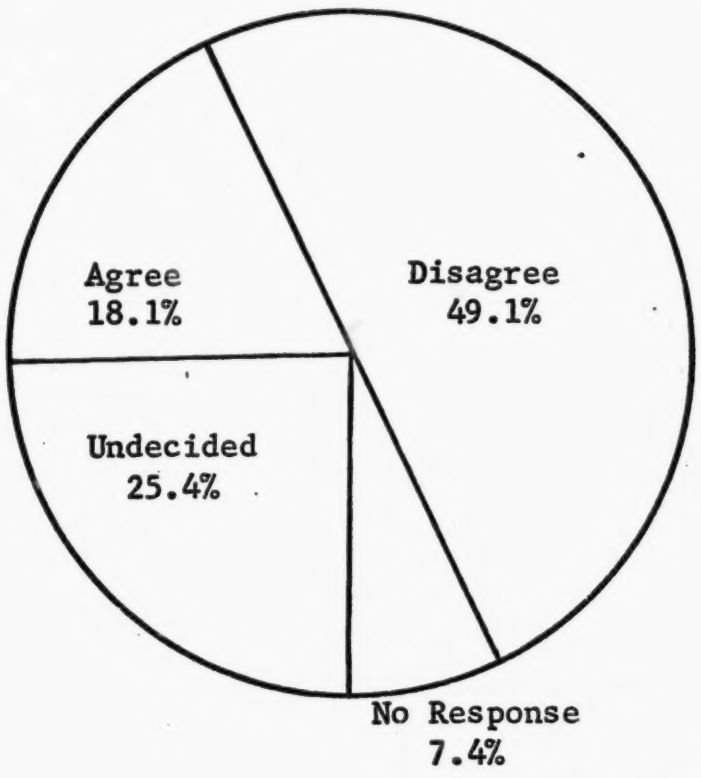


FIGURE 9: INDUSTRIES IN WYOMING ARE ABLE TO SECURE LOCALLY QUALIFIED PEOPLE TO FILL JOB OPENINGS.

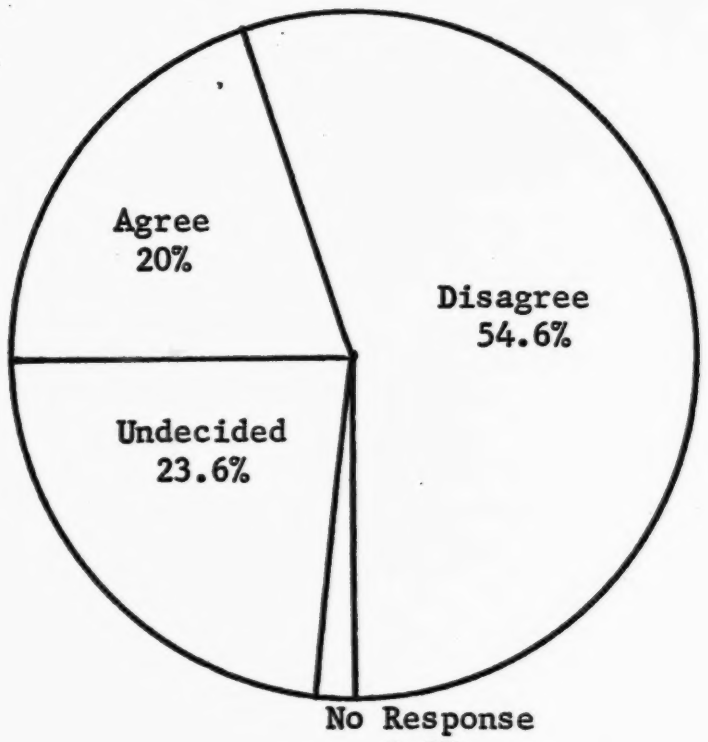


FIGURE 10: MOST INDUSTRIES SHOULD PROVIDE ON-THE-JOB TRAINING FOR NEW EMPLOYEES.

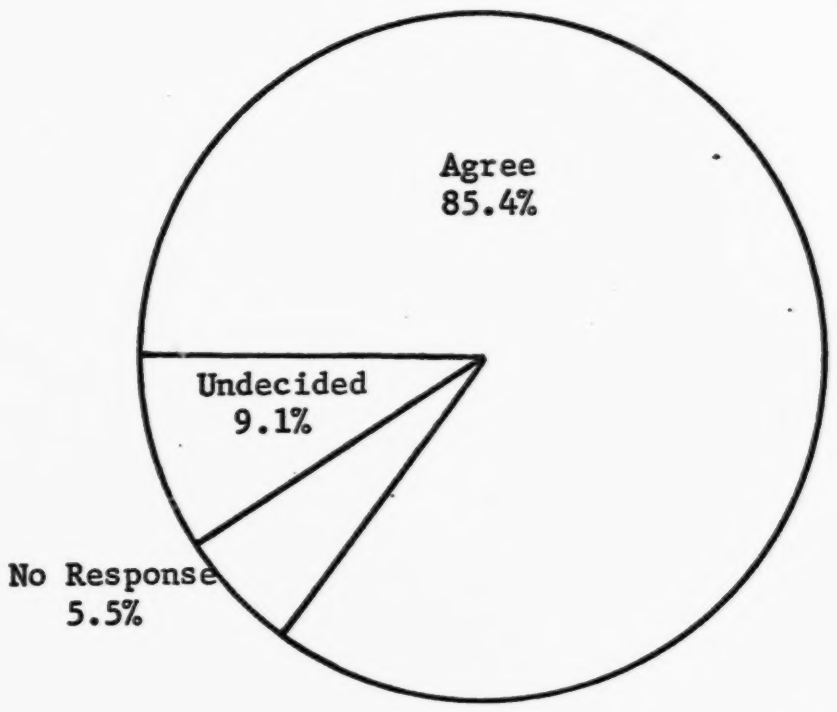


FIGURE 11: IT IS THE RESPONSIBILITY OF WYOMING HIGH SCHOOLS TO TEACH GOOD WORK HABITS AND GOOD ATTITUDES TOWARD WORK IN ADDITION TO SKILLS AND KNOWLEDGE.

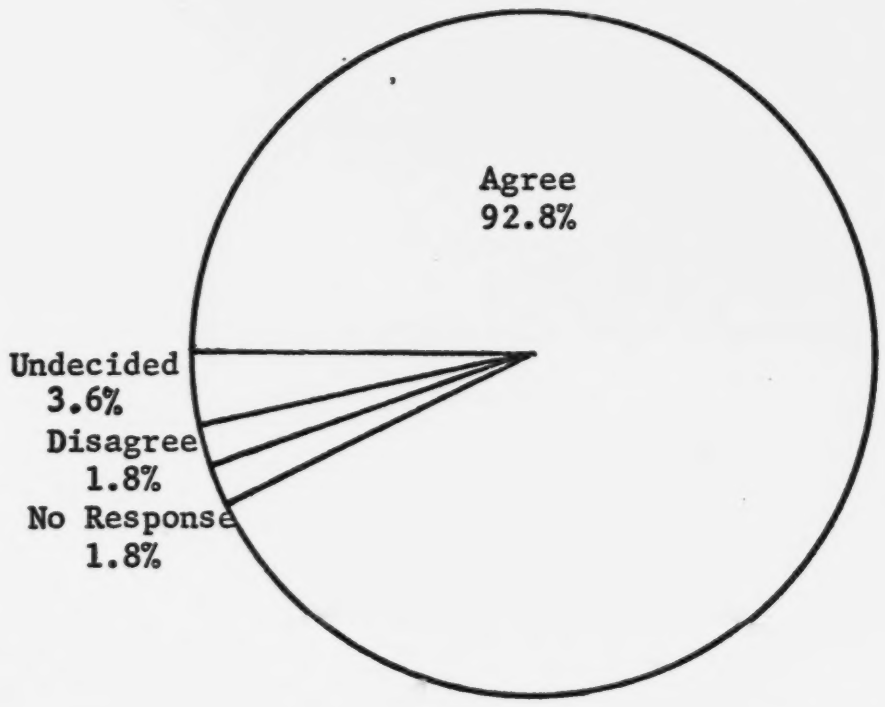
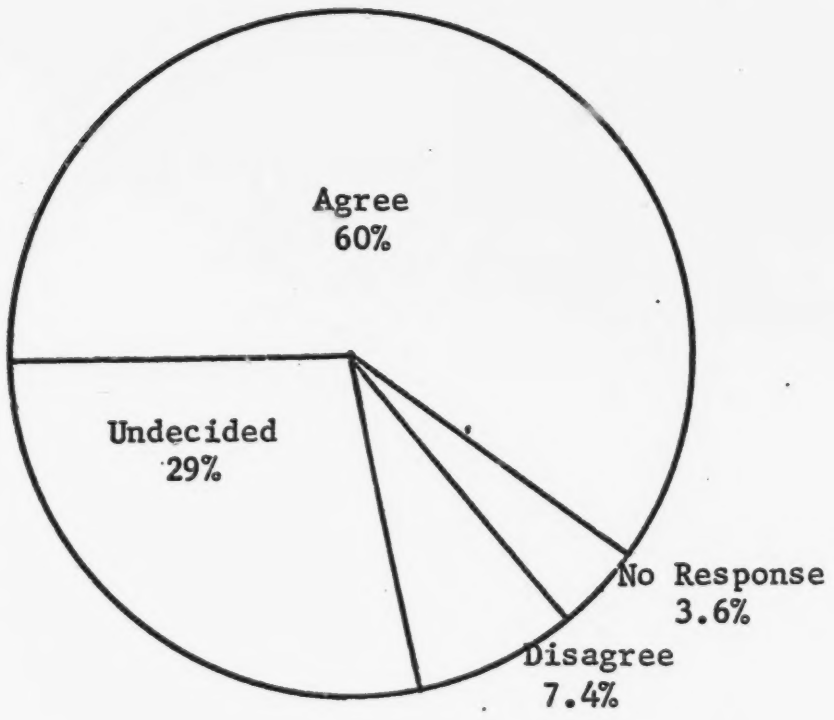


FIGURE 12: IT IS FEASIBLE FOR THE PUBLIC HIGH SCHOOLS OF WYOMING TO PREPARE STUDENTS FOR SPECIFIC VOCATIONS RELATED TO WYOMING INDUSTRIES.



The average current openings or present vacancies for the industries was three. The average expected employment in one year for the industries was 118, and the average expected employment in the next five years for the industries was 155.

The section dealing with recruitment difficulties of the industries responding to the questionnaire indicated that 46.3% of the industries had no recruitment difficulties, 3.7% of the industries lacked applicants, and 51% of the industries lacked qualified applicants.

The section on educational requirements for employment indicated that 21.5% of the industries responding to the questionnaire required a high school diploma, 15.5% required a high school equivalency, 3% required a tenth grade completion, 1.5% required a grade school completion, 6.2% required a junior college or college education, and 52.3% had no special educational requirement.

The industries responding to the questionnaire indicated that 3% of their employees learned their trade at a private trade school, 7.5% learned their trade at a public vocational school, 11.9% received their training in the armed services, 65.7% learned their trade through in-service or on-the-job training, and 11.9% learned their trade in high school.

Analysis of Questionnaire Data

In analyzing the questionnaire data, it became apparent that the data could best be understood if it were analyzed in the framework of providing information in a specific area. The specific areas covered were: (1) Need, (2) Philosophy, (3) Type of Program, and (4) Responsibility. The statements have been underlined in an effort to aid the

reader in following the data.

Need. Five statements in the questionnaire were intended to indicate the attitudes of industry toward the need for vocational education.

The first statement dealt with the need for job training beyond high school in a limited number of skills to qualify for employment in a specific job. The response, seen in Figure 1, indicated a need in this area. The response to this statement was 78.2% agree that Job training beyond high school is needed in a limited number of skills to qualify for employment in a specific job.

The second statement referred to the public high schools ability to offer sufficient vocational education. The response, seen in Figure 4, indicated a moderate need for more vocational education in Wyoming's high schools. The response to this statement was 49.1% disagree and 34.5% undecided that The public high schools of Wyoming offer sufficient vocational educational opportunities to prepare our young people for employment. The response could not be termed as strong, but did give some indication of need. The fairly large undecided response indicated that some industries in Wyoming did not clearly know what vocational education was being offered in Wyoming's schools.

The third statement, Figure 5, referred to the ability of people to obtain employment with a general high school education. The statement received a moderate response with 54.5% agree and 32.8% disagree that A general high school education is sufficient for employment in most industries. The response indicated that a majority of the industries felt that a general high school education was all that was needed for

general employment. The rather high disagree response, 32.8%, indicated that some industries felt that more than a general high school education was needed for general employment. This statement related back to the general information question which ask the industrial employers to indicate what education requirements their companies had. The response showed that a majority of the industries, 52.3%, had no special educational requirements.

The response to the statement, Wyoming industry offers sufficient job opportunities for graduating high school students wanting employment in the state, as shown in Figure 8, indicated a moderate need for more job opportunities in Wyoming. Forty-nine and one-tenth percent of the industries disagreed, and 25.4% were undecided. The undecided response seemed to indicate that some industries did not clearly know whether there was a need in this area in Wyoming.

Industries in Wyoming are able to secure locally qualified people to fill job openings, was the last statement in this area. The response, shown in Figure 9, indicated that 54.6% of the industries disagreed, and 23.5% of the industries were undecided. The response showed a moderate need for more qualified people in Wyoming. This statement related back to the general information section dealing with recruitment difficulties in Wyoming. The recruitment response indicated that 51% of the industries lacked qualified applicants.

Philosophy. The object of the three statements in the questionnaire relating to philosophy was to learn the attitudes of industry toward primary purposes in vocational education.

Basically, the question to be answered was: Should vocational education be designed to serve the employment needs of Wyoming, or of local and out of state industry.

The first statement, Vocational-technical education in the public schools of Wyoming should be based on the employment needs of Wyoming, received a response of 60% agree, and 32.8% disagree, as Figure 2 shows. The results indicated a moderate concern by Wyoming's industry for training local people for the needs of the state of Wyoming.

The statement, Vocational education in the public high schools of Wyoming should be based on the needs of industry, received a moderately strong response, as Figure 3 shows. Seventy-eight and two-tenths percent of the industries agreed.

The third statement in this series was To best serve the students of Wyoming, Vocational Education programs must be guided by the needs of both local and out of state industries. The results to this statement, Figure 6, showed a strong response of 89.1% agree. The response seemed to indicate that Wyoming industry was aware of the close relationship of the student, the program, and industry.

Type of Program. The questionnaire offered two statements intended to learn the attitude of industry toward a more technical program in vocational education.

The statement, Programs more technical in nature, which cover knowledge and skills to a greater depth than those presently being offered, should be offered by the high schools of Wyoming, showed a moderate response of 47.3% agree and 30.9% undecided. The rather large undecided

response tended to show that Wyoming industry did not know what type of vocational education programs were being offered by Wyoming high schools.

The second statement, shown in Figure 12, dealt with the feasibility of Wyoming high schools to prepare students for specific vocations. The response to this statement was 60% agree and 29% undecided that It is feasible for the public high schools of Wyoming to prepare students for specific vocations related to Wyoming industries. The moderate agree response and the large undecided response seemed to indicate that many industries did not thoroughly understand the educational structure in Wyoming.

Responsibility. Two statements in the questionnaire dealt with the responsibilities for vocational education.

The first statement was intended to show if industries should be responsible for employee training. The statement, Most industries should provide on-the-job training for new employees, received a strong response of 85.4% agree and no disagree. This statement related back to the question in the general information section of the questionnaire dealing with where most of the employees in the industries had learned their trade. The response to this question indicated that 65.7% of the employees learned their trade through in-service or on-the-job training.

The last statement in this section, It is the responsibility of Wyoming high schools to teach good work habits and good attitudes toward work in addition to skills and knowledge, received the strongest response in the questionnaire with 92.8% agree. The response indicated that there was interest among the industrial employers in having the public high

schools of Wyoming teach good work habits and attitudes.

Analysis of Job Placement Data

An analysis of the job placement data, Table II, indicated definite job placement trends in Wyoming for the five-year period. A review of the Table showed certain job placement divisions increased during the five-year period, while certain other job placements declined during the same period.

The job divisions in which there were increases in job placements during the five-year period were: forestry and fisheries, mining, railroad, state government, and local government.

The job divisions in which there were decreases in job placements during the five-year period were: construction, manufacturing, other public utilities, wholesale and retail trade, insurance and real estate, services, private household, and federal government.

The data indicated that there was a larger downward trend in job placements in Wyoming than an upward trend which indicated the availability of jobs in Wyoming was decreasing. This conclusion substantiates the statement made in the first chapter of the thesis, page 2, which stated that the young people of Wyoming were compelled to migrate out of the state to find employment.

Analysis of Industrial Arts and Trades and Industry Class Data

An analysis of the trade and industry and industrial arts classes offered by the public high schools of Wyoming during the 1962 to 1967 school years, Table III, indicated several trends.

The number of classes and the enrollment in classes indicated a

general upward trend in both the number of classes and the enrollment for the five-year period for both the industrial arts and the trades and industry classes. The major exception to this trend was the general shop classes, which tended generally to decline in the number of classes and the number of students. This might be explained by the increase in the variety of industrial arts classes which were offered. Perhaps more schools were offering more specific industrial arts classes as the years progressed, and thus offered less general shop classes.

The class data indicated that general shop, mechanical drawing, and woodworking were the three biggest areas both in number of classes and class size in industrial arts. The data also indicated that auto mechanics, machine shop, and mechanical drawing were the biggest areas in trades and industry both in total enrollment and in number of classes.

CHAPTER IV

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

The major purpose of the present study was to determine whether or not the vocational curriculum offered in Wyoming's secondary schools was directed toward providing Wyoming high school students with occupational skills that permitted employment in Wyoming's industries, businesses, and trades. The study was important because it was geared to provide useful information to Wyoming schools in preparing vocational offerings, and also to provide useful information for the Wyoming Research Coordinating Unit.

Information for the study was gathered from three sources: (1) vocationally oriented classes were discovered by examining Wyoming Department of Education records; (2) opinions of Wyoming industry concerning vocational education was obtained by use of a questionnaire sent to the seventy-two largest industrial employers in Wyoming; (3) types and numbers of nonagriculture job placements were discovered by examining the statistical reviews of the Employment Security Commission of Wyoming.

Findings from the analysis of job placement data indicated that job placements in the State of Wyoming were generally declining. The job divisions in which there were job placement increases were forestry and fisheries, mining, railroad, and state and local government.

Findings from the analysis of vocational class data indicated that the number of classes and the class enrollments were increasing both in

the industrial arts and the trades and industry classes. The biggest class areas in industrial arts were general shop, mechanical drawing, and woodworking. The biggest class areas in trades and industry were auto mechanics, machine shop, and mechanical drawing.

Findings from the analysis of the questionnaire data indicated trends in each of the four specific areas. The data showed a need for vocational education in Wyoming. It also indicated that vocational education in Wyoming should be geared to the needs of Wyoming, as well as to the needs of in and out-of-state industry. The data also indicated that it was feasible for Wyoming schools to prepare students for specific vocations, and that a vocational program more technical in nature might be desired. The data further showed that it was the responsibility of industry to provide on-the-job training for employees, and the responsibility of the public schools to teach good work habits and good attitudes toward work along with skills and knowledge.

Conclusions

On the basis of the data presented in this investigation, the following conclusions appear warranted:

1. Training beyond high school is needed to prepare students for employment in specific jobs.
2. Wyoming's secondary school vocational programs are not geared to Wyoming industries because Wyoming industries are unable to secure locally qualified people to fill job openings, and at the same time the young people of the state are unable to find sufficient job opportunities in the state.

3. Vocational education in Wyoming should be guided by the needs of Wyoming and needs of in and out-of-state industry.
4. Vocational education is needed in the state of Wyoming.
5. The public high schools of Wyoming do not offer sufficient vocational education opportunities to prepare students for employment.
6. Industries in the state of Wyoming should provide on-the-job training for employees.
7. It is the responsibility of the public high schools in Wyoming to teach good work habits and good attitudes toward work as well as skills and knowledge.
8. It is feasible for the public high schools in Wyoming to prepare students for specific vocations.
9. Job placements in Wyoming are generally declining.
10. The number of classes and enrollment in Wyoming's industrial arts and trades and industry classes are generally increasing.

Recommendations

1. Educators of Wyoming should develop better means of communication with Wyoming industry and should work toward more mutual commitment to vocational education in the state.
2. Wyoming industries should be involved with vocational education by helping to secure funds to train instructors and by donating special equipment to the vocational program.
3. Wyoming should give special attention to the development of more vocational programs beyond the high school level.

4. The existing vocational programs in Wyoming should be increased and strengthened, and more opportunity for vocational training should be provided by Wyoming's public high schools.
5. There should be a greater increase in the industrialization of Wyoming which would in turn bring more job opportunities to the state.
6. The Vocational Department of the State Department of Education should be provided with an adequate staff to allow for better direction and coordination of vocational programs in the state of Wyoming.

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APPENDIX

THE UNIVERSITY OF WYOMING
COLLEGE OF EDUCATION
LARAMIE, WYOMING 82070

Dear Sir:

Your judgement as a personnel director is valuable to me. I am currently engaged in a study concerned with vocational education and manpower needs in Wyoming. This study is being conducted in coordination with the Wyoming Research Coordinating Unit and under the supervision of the Vocational Education Department at the University of Wyoming. Enclosed is a short questionnaire that I am asking you to complete and return to me in the enclosed stamped, self-addressed envelope.

The purpose of this study is to determine if you believe vocational education in the high schools of Wyoming is contributing to manpower needs. We would also like to learn how vocational education in the high schools of Wyoming can do a better job of getting students ready for the labor market.

Information from this questionnaire is confidential.

Thank you for your time and cooperation. An early reply will be appreciated.

Sincerely yours,

Robert D. Wright
College of Education
University of Wyoming
Laramie, Wyoming 82070

VOCATIONAL QUESTIONNAIRE

Name of company _____

Address _____

Name of person filling out questionnaire _____

Type of business, please check.

Agriculture, Forestry, and Fisheries _____
Mining _____
Contract Construction _____
Manufacturing _____
Transportation, Communication, Electricity, Gas, and Sanitary Services _____
Wholesale and Retail Trade _____
Finance, Insurance, and Real Estate _____
Services _____
Government _____
Other, specify _____

GENERAL INFORMATION

1. Number of employees in your company _____
2. Number of trainees now employed by your company _____
3. Turnover (number per year) _____
4. Current openings (present vacancies) _____
5. Expected employment in one year _____
6. Expected employment in next five years _____

What recruitment difficulties do you have? Please check.

1. No difficulty _____
2. Lack applicants _____
3. Lack qualified applicants _____
4. Other, specify _____

What are the educational requirements for employment in your company? Please check.

1. High school diploma _____
2. High school equivalency _____
3. Tenth grade completion _____
4. Grade school completion _____
5. Jr. college or college _____
6. No special requirements _____
7. Other, specify _____

Where have most of your employees learned their trade?

1. Private trade school _____
2. Public vocational school _____
3. Armed services training _____
4. In-service training _____
5. High school _____
6. Other, specify _____

FEELINGS AND ATTITUDES

Please indicate with a check mark the term which best describes how you feel about the statement. Please add comments in the space provided at the right of the question, if desired.

1. Job training beyond high school is needed in a limited number of skills to qualify for employment in a specific job.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

2. Vocational-Technical Education in the public schools of Wyoming should be based on the employment needs of Wyoming.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

3. Vocational Education in the public high schools of Wyoming should be based on the needs of industry.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

4. The public high schools of Wyoming offer sufficient vocational educational opportunities to prepare our young people for employment.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

5. A general high school education is sufficient for employment in most industries.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

6. To best serve the students of Wyoming, Vocational Education programs must be guided by the needs of both local and out of state industry.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

7. Programs more technical in nature, which cover knowledge and skills to greater depth than those presently being offered, should be offered by the high schools in Wyoming.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

8. Wyoming industry offers sufficient job opportunities for graduating high school students wanting employment in the state.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

9. Industries in Wyoming are able to secure locally qualified people to fill job openings.

   a. Agree _____
   b. Undecided _____
   c. Disagree _____

   Comments:

10. Most industries should provide on-the-job training for new employees.

    a. Agree _____
    b. Undecided _____
    c. Disagree _____

    Comments:

11. It is the responsibility of Wyoming high schools to teach good work habits and good attitudes toward work in addition to skills and knowledge.

a. Agree _____ Comments:
b. Undecided _____
c. Disagree _____

12. It is feasible for the public high schools of Wyoming to prepare students for specific vocations related to Wyoming industries.

a. Agree _____ Comments:
b. Undecided _____
c. Disagree _____

COMMENTS FROM QUESTIONNAIRE

1. Job training beyond high school is needed in a limited number of skills to qualify for employment in a specific job.

   a. Each job has certain requirements and high school can't cover a wide enough area for all.

   b. Helpful in most positions--promotional opportunity greater.

   c. Job training is basically needed in all skills to qualify for employment in a specific job.

   d. High school is not sufficient.

   e. The skills are not a limited number and are growing continuously.

   f. May be true in some industries. In our plant, employees are hired into the lowest labor classifications by contract with unions.

   g. I think vocational training beyond high school is needed for more than just a limited number of jobs.

   h. Especially for electricians, mechanics, welders, and accountants, etc.

   i. Even a small amount of training helps.

   j. I would say that almost every job should require job training.

   k. Needed for professional and administrative jobs.

   l. Draftsmen, mechanics, secretarial, and chemical technicians.

2. Vocational-Technical Education in the public schools of Wyoming should be based on the employment needs of Wyoming.

   a. Unfamiliar with overall Wyoming labor force.

   b. Not unless Wyoming can provide the employment.

   c. Population is very mobile and Wyoming doesn't have enough jobs.

   d. Would definitely limit fields.

e. Should be based on desires and demands of students--stressing of Wyoming needs should be made.

f. Employment needs in Wyoming are not comprehensive enough. Additional training is needed.

g. The limited possibilities for employment within the state force our young people to look elsewhere for good jobs. As a minimal requirement public schools should provide vocational training for the needs of Wyoming.

h. Should be based on the employment needs of the nation.

i. They should be able to go outside the state also.

j. We believe the needs of Wyoming and the students should be considered.

3. Vocational Education in the public high schools of Wyoming should be based on the needs of industry.

a. This seems reasonable if effort is being made to keep Wyoming youth in the state.

b. Both in state and out of state.

c. For many students who are not college material. This type of education is needed.

d. With a view toward what will be needed as well as what is needed presently.

e. Students needs.

4. The public high schools of Wyoming offer sufficient vocational opportunities to prepare our young people for employment.

a. Our schools in the state are not large enough to accomplish this nor do they have money or teachers for this.

b. Skilled tradesmen--mechanics, carpenters, plumbers, and brick masons, etc., are largely World War II veterans--no young people in these trades.

c. In a limited capacity--it prepares some for specific jobs.

d. May be true in a few schools and in a few vocations such as clerical and accounting.

e. Vocational training opportunities should be expanded for high school graduates. Only about 30% go on to college. Only a small part of the remaining 70% ever receive vocational training, hence, remain unskilled.

f. Not anywhere near sufficient.

g. We believe this training should be carried on in more colleges.

h. Need more vocational and a junior college in Cheyenne.

i. I can only speak for the---high school. I believe this is true because of lack of facilities, funds, and possible lack of students.

j. Not enough time. Improper distribution of funds.

k. Students must be encouraged to pursue higher education as high school is adequate for only unskilled jobs.

l. Students need to go further.

5. A general high school education is sufficient for employment in most industries.

a. It is sufficient for our industry for most employees.

b. Specialized educations are in demand.

c. Most jobs have on-job training.

d. Not the preferred jobs and advancement is limited.

e. Sufficient for a large part of labor force.

f. With additional training in their field--not necessarily a college degree.

g. Some type of additional training is most always required.

h. Yes, for just common labor, but to work for a better position, more education would be helpful.

i. Education and diplomas are two different things.

j. Only if the company has on-the-job training.

6. To best serve the students of Wyoming, Vocational Education programs must be guided by the needs of both local and out of state industry.

   a. In fairness to the students for widest range of employment opportunities.

   b. Wider variety of choice for individuals.

   c. I would think that primarily, training should be based on in-state needs.

7. Programs more technical in nature, which cover knowledge and skills to greater depth than those presently being offered, should be offered by the high schools in Wyoming.

   a. General background should be offered in schools with employer programs giving technical training.

   b. Should be prepared in high school to obtain more technical education in college.

   c. Various levels of Vocational-Technical training should be made available in our high schools. Conceivably at the junior level the student, through means of test qualification, should be advised whether to pursue academic preparation for higher education or to prepare for vocational work in industry. It may be advisable for the more gifted student to have available one or two year advanced training at a centerally located vocational school.

   d. Or by trade schools or junior colleges.

   e. Need more two-year colleges.

   f. Basic field work in skills that may be of special interest to students.

   g. Trade school at 13-14 grade level for relatively large area would be better.

   h. Continue to interest them enough to continue in community college or trade school.

   i. Should go on to vocational training school.

8. Wyoming industry offers sufficient job opportunities for graduating high school students wanting employment in the state.

   a. Most of our young people have to leave the state because of this lack of opportunity.

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b. Limited.

c. In some fair sized Wyoming towns a good number of graduates must go out of state to find jobs.

d. But we are gaining.

e. We can not hire enough help.

f. We are in desperate need of jobs--both for high school and college grads.

g. We have no statistical data, but we would tend toward thinking that there are probably not adequate job openings for young people.

9. Industries in Wyoming are able to secure locally qualified people to fill job openings.

a. In our particular case, this is true.

b. In this area we are, but probably not in the rest of the state.

c. Skilled and professional are not available generally. Here at least.

d. Except for large numbers at a time in certain skills.

e. Not always true.

f. Skilled jobs are generally filled from outside.

g. True in no skilled categories; generally not true where specialized skills are required.

h. It is difficult to obtain local employees who can meet both mental and physical standards.

i. There are adequate numbers of people; but they frequently lack specific training for specific jobs.

j. Only where industry provides training programs.

k. In our area this is true for the majority of requirements.

10. Most industries should provide on-the-job training for new employees.

a. Depends entirely on the industry. Does allow for promotion from within the company and this is a good morale booster.

b. A necessity.

c. We have to.

d. Should provide familiarization on job and unique procedures but not training from scratch on skilled jobs.

e. A minimum amount of training for orientation.

f. To a certain extent or certain jobs.

g. I believe that, by necessity, most major industries do.

h. As far as a small company can afford the expense.

i. Basic knowledge should be obtained by employees before applying for certain jobs.

j. Companies can generally provide 'applied' training for those who have basic skills.

11. It is the responsibility of Wyoming high schools to teach good work habits and good attitudes toward work in addition to skills and knowledge.

a. Emphasis heavy for both sexes.

b. They should but they don't.

c. This could be the greatest service to an industry which has on-the-job training. Also the greatest service to the student.

d. This really needs to be stressed--we call it 'job appreciation.'

e. Within their means which are limited. Good habits and attitudes are as much a home responsibility as the schools.

f. The schools and society in general tend to set youth on a pedestal which does not breed good work habits, work attitudes.

g. Most definitely.

h. If at all possible.

12. It is feasible for the public high schools of Wyoming to prepare students for specific vocations related to Wyoming industries.

a. I feel there would be definite limitations on this. Probably all students would not be interested in the limited choice within the state.

b. This is being done in some schools in their distributive education program.

c. If student indicates interest.

d. There are many jobs in metal working and machine shop--including lathe work but woodworking is preparation for a hobby only today in most cases.

e. High school vocational training programs should be expanded as needed to take care of students. But how about men who do not finish high school?

f. Only with expanded school plant facilities along with substantially increased financial assistance. I believe there should be a strong movement in this direction.

g. This would involve a terrific investment in tooling and equipment.

h. Broadmindedness is great and good education is extremely important for acceptance into the moving society. But to have Wyoming educate its young people in vocations which may never be used in Wyoming is self-defeating. The need is to generate growth and interest in Wyoming.

i. Disagree--too small of a population and a small industrial demand for most trades.

j. Job for vocational schools and junior colleges.